



State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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September 22, 2000

Chuck Semborski, Environmental Supervisor
Energy West Mining Company
P. O. Box 310
Huntington, Utah 84528

Re: Pumphouse Reclamation, PacifiCorp, Des-Bee-Dove Mine, ACT/015/017-AM00A,
Outgoing File

Dear Mr. Semborski:

The above-referenced amendment has been reviewed and there are deficiencies that must be adequately addressed prior to approval. A copy of our technical analysis is enclosed for your information. Please respond to these deficiencies by November 30, 2000 or the Division will return your application.

PacifiCorp has voluntarily proposed to do additional work on adjacent 0.65 acres abandoned coal mining disturbances. The Division appreciates this additional work and agrees that only those areas defined as disturbed as shown on the map in Appendix IV, Section 645-301-500: Map Section will be held to the standards of the State of Utah R645 Coal Mining Rules.

If you have any questions, please feel free to call me at (801) 538-5258.

Sincerely,

A handwritten signature in cursive script that reads "Susan M. White".

Susan M. White
Acting Permit Supervisor

smw/sm

Enclosure:

cc: Price Field Office

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State of Utah



Utah Oil Gas and Mining

Coal Regulatory Program

Des Bee Dove Mine
Pumphouse Area Reclamation
ACT/015/017-AM00A
Technical Analysis
September 20, 2000

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INTRODUCTION

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INTRODUCTION

The Pumphouse Area reclamation plan was received by the Division May 26, 2000. Historical use of the Pumphouse area pre-dates SMCRA. Actual pumphouse construction occurred sometime between 1971 and 1974 and was used until the mid to late 70's when the pumphouse was no longer needed and was de-activated. In 1999, the surface facilities (including the pumphouse facilities) of the Des-Bee-Dove Mine were removed. The area of disturbance is small, approximately 1.5 acres.

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INTRODUCTION

SUMMARY OF OUTSTANDING DEFICIENCIES

The Technical Analysis regarding the proposed permit changes is not complete at this time, pending submittal of additional information by the Permittee and further review by the Division, to address outstanding deficiencies in the proposal. A summary of those outstanding deficiencies is provided below. Additional comments, concerns, and deficiencies may also be found within the analysis and finding make in the Draft Technical Analysis which have not been presented in this summary. Upon finalization of this review, any outstanding deficiencies will be evaluated for compliance with the regulatory requirements. Such deficiencies may be conditioned to the requirements of the permit issued by the Division, result in denial of the proposed permit changes, or may result in other executive or enforcement actions as deemed necessary by the Division at that time to achieve compliance with the Utah Coal Regulatory Program.

Accordingly, the permittee must address those deficiencies as found within this Draft Technical Analysis and provide the following, prior to approval, in accordance with the requirements of:

R645-301-357.300, all rill and gully repair will require a prior approved plan incorporated in the Mining and Reclamation Plan and a determination by the Division whether or not this activity restarts the period of extended liability. 14

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SUMMARY OF OUTSTANDING DEFICIENCIES

ENVIRONMENTAL RESOURCE INFORMATION

SOILS RESOURCE INFORMATION

Regulatory Reference: 30 CFR Sec. 783.21, 817.200(c); R645-301-411, -301-220.

Analysis:

The Des-Bee-Dove pumphouse reclamation amendment contains adequate information for the following:

- Soil Survey
- Soil Characterization

Soil Survey

A Soil Survey was performed for the Des-Bee-Dove pumphouse by Dr. A. R. Southard, Soil Scientist, from Utah State University. Southard reported three major conclusions from his survey:

1. Horizon A material does not exist in sufficient quantity to warrant soil salvage.
2. Existing selective soil materials are acceptable as plant growth medium.
3. Final reclamation would be enhanced by introduced grass species.

Soils within the vicinity of the Pumphouse Area were classified as *Typic Ustochrepts-Lithic Ustorthents- Rock Outcrop Loamy-Skeletal, Shallow 40-60% slopes*. Soils were described as mostly loamy-skeletal and lithic with areas of sandstone outcrops. Soils are approximately 50% Typic Ustochrepts, 25% Lithic Ustorthents, and 20% Rock Outcrop Rubble Land about.

In May 1989, Southard reclassified the soils as loamy-skeletal mixed mesic Lithic Ustorthents with a 0-4 inch A horizon, 4-14 inch C horizon, and R (sandstone rock) below 14 inches. Soils are moderately calcareous and alkaline (pH 8.3) with disseminated carbonates in the A horizon. The C horizon is described as strongly calcareous and alkaline (pH 8.8) with disseminated carbonates. The A horizon contains 55% gravels which will lessen the water holding capacity significantly. The C horizon contains 40% flagstone and 30% channery.

Soil Characterization

Although soil sampling was conducted at the Des-Bee-Dove Mine, these samples were taken near the portal areas and are not representative of the pumphouse area. The amendment states that successful native vegetation establishment and growth throughout the pumphouse site has demonstrated soil suitability.

Findings:

The information provided meets the regulatory requirements of this section.

OPERATION PLAN

OPERATION PLAN

TOPSOIL AND SUBSOIL

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-230.

Analysis:

Soil Salvage

Neither topsoil nor subsoil were salvaged at the Pumphouse area during construction of the storage tank and pumphouse. A loop road was constructed, graded and graveled to access the 10,000 gallon storage tank behind the pumphouse. A berm was built along the access road which deflects runoff to a sediment trap located at the southern end of the site. The amendment identifies this berm as a "topsoil" source for reclamation use.

Findings:

The information provided meets the regulatory requirements of this section.

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OPERATION PLAN

RECLAMATION PLAN

RECLAMATION PLAN

POSTMINING LAND USES

Regulatory Reference: 30 CFR Sec. 784.15, 784.200, 785.16, 817.133; R645-301-412, -301-413, -301-414, -302-270, -302-271, -302-272, -302-273, -302-274, -302-275.

Analysis:

The amendment has not changed the stated postmining land use of wildlife and grazing.

Findings:

The application meets the minimum regulatory requirements of this section.

PROTECTION OF FISH, WILDLIFE, AND RELATED ENVIRONMENTAL VALUES

Regulatory Reference: 30 CFR Sec. 817.97; R645-301-333, -301-342, -301-358.

Analysis:

Page 4-97 (revised 4/8/98) states that there are no known active aerie territories associated with the project. This statement is not correct. An active nest is located within visual sight of the pumphouse location. However, Section R645-301-300: Biology, Appendix IV, identifies Golden Eagle nest 75 IA in close proximity to the pumphouse but outside the ½ mile buffer zone. Reclamation work conducted in the fall should have no impact on these nests.

Findings:

The application meets the minimum regulatory requirements of this section.

BACKFILLING AND GRADING

Regulatory Reference: 30 CFR Sec. 785.15, 817.102, 817.107; R645-301-234, -301-537, -301-552, -301-553, -302-230, -302-231, -302-232, -302-233.

Analysis:

Backfilling and grading operations are minor. No design has been provided and no design is required. Small amounts of surface coal waste deposits will be buried on site. The road area will be

ripped and the berm material used as topsoil. Site photos are provided in Appendix A of R645-301-500, Appendix IV of the application.

Findings:

The application provided meets the minimum regulatory requirements of this section.

TOPSOIL AND SUBSOIL

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-240.

Analysis:

The MRP amendment contains adequate information concerning soil redistribution as follows:

- Soil Redistribution
- Soil Stabilization and Erosion Control

Soil Redistribution

No topsoil was salvaged or stockpiled at this site. Indigenous materials will be used as substitute topsoil and growth medium. However, the road berm will be used as topsoil.

Table 1, Procedural step of reclamation, located in Section R645-30-500 Engineering, describes in detail each chronological step of reclamation from sediment control to seeding the area as follows:

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RECLAMATION STEP	DESCRIPTION
1. Place sediment control down-slope of reclamation	Straw bales will be positioned on the south side of the existing road.
2. Non-coal waste clean-up	Remove and transport all non-coal waste in and around the disturbed area to the Emery County landfill.
3. Coal mine waste clean-up	Remove all coal waste material in the disturbed area and bury in the pumphouse/storage tank area.
4. Reestablish minor drainage	Conducted using backhoe.
5. Roughen access road and remove berm	After access road is roughened, material from berm will be used as topsoil. Areas will be deep gouged. A certified weed free alfalfa hay will be contemporaneously incorporated into the soil.
6. Remove sediment trap on southern end of disturbed area.	Dispose of trap material and recontour with shovel and rake. Care will be taken not to disturb established vegetation.
7. Recontour and roughen location of pumphouse and water storage tank	Recontouring consists of blending disturbed area with existing topography. Areas will be deep gouged. A certified weed free alfalfa hay will be incorporated into the soil.
8. Seed area	A certified seed mix as outlined in the Biology section will be used to seed the areas during steps 5 and 7.
9. Install signs	Signs will be placed around the reclaimed site.

The pumphouse area will be recontoured to establish overland flow within the disturbed area. As identified in step 5 of Table 1, material from the road berm will be used as topsoil and redistributed over the access road after the road is ripped and deep gouged. Ripping and deep gouging will help relieve soil compaction and promote root penetration in areas that were compacted by vehicle traffic.

Soil Stabilization and Erosion Control

Deep gouging will be used to control runoff and trap sediment. A track hoe bucket is used to create the deep gouges in a random and discontinuous fashion. Pockmarks created are approximately three feet in diameter and one and half feet deep. Gouging serves both to control erosion through water/sediment retention and enhancing vegetation growth through trapping precipitation thus promoting water infiltration.

Rocks and boulders will be randomly positioned throughout the pumphouse area and along the access road to help enhance vegetation establishment by creating micro habitats.

Soil Nutrients and Amendments

No fertilizers or other soil amendments will be used in the pumphouse area.

Findings:

The information provided meets the regulatory requirements of this section.

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 784.14, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-301-512, -301-513, -301-514, -301-515, -301-532, -301-533, -301-542, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-733, -301-742, -301-743, -301-750, -301-751, -301-760, -301-761.

Analysis:

Diversions

No diversions are being constructed for the reclamation of the pumphouse area. A minor drainage or swale will be reestablished through the area to complement the surrounding drainage.

Sediment Control Measures

The primary sediment control measures for the pumphouse area is extreme surface roughening as a final surface preparation. Hay or hydromulch will also be used to stabilize the soil surface. Straw bales will be placed downslope and along the mine access road should any runoff occur.

Findings:

Provided the straw bales are installed correctly, the information provided meets the minimum regulatory requirements of this section.

REVEGETATION

Regulatory Reference: 30 CFR Sec. 785.18, 817.111, 817.113, 817.114, 817.116; R645-301-244, -301-353, -301-354, -301-355, -301-356, -302-280, -302-281, -302-282, -302-283, -302-284.

Analysis:

General Requirements

The seed mixture is identified in Table 1 of section R645-301-300, Appendix IV. The seed mixture contains a diverse mixture of species native to the site. The mixture contains a warm season grass component. It is advised to plant this portion of the seed mixture just prior to summer rains,

RECLAMATION PLAN

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usually in June or by mid-July. The seed mixture is either to be broadcast by hand or by a hydroseeder. The Operator should take care if using a hydroseeder, that the seed is in the water slurry as short a time possible, in no case should the seed be in the water longer than a half hour.

Timing

A fall seeding is assumed. The Operator is urged to also conduct a summer seeding with the warm season species.

Mulching and Other Soil Stabilizing Practices

Section 340, of R645-301-300 in Appendix IV states that Certified weed free alfalfa hay will be incorporated into the soil following grading at the rate of 2000 lbs/acre. If seed is applied with a hydroseeder then hydromulch and not hay mulch will be applied at the rate of 1000 lbs./acre with an addition of 500 lbs. tackifier.

Standards for Success

The Operator plans (Section 350 of R645-301-300 in Appendix IV) state that they will, if needed, conduct rill and gullies repair. This portion of the application is not in compliance with the regulations of R645-301-357.300, Husbandry Practices. Rill and gully repair is only allowed under very specific condition without restarting the extended responsibility period. The regulations are as follow:

- 357.360. Highly Erodible Area and Rill and Gully Repair. The repair of highly erodible areas and rills and gullies will not be considered an augmentative practice, and will thus not restart the extended responsibility period, if the affected area as defined in R645-301-357.363 comprises no more than 15% of the disturbed area for the first 20% of the extended responsibility period and if no continuous area to be repaired is larger than one acre.
- 357.361. After the first 20% of the extended responsibility period but prior to the end of the first 60% of the responsibility period or until Phase II bond release, whichever comes first, highly erodible area and rill and gully repair will be considered augmentative, and will thus restart the responsibility period, if the area to be repaired is greater than 3% of the total disturbed area or if a continuous area is larger than one acre.
- 357.362. The extent of the affected area will be determined by the Division in cooperation with the Permittee.
- 357.363. The area affected by the repair of highly erodible areas and rills and gullies is defined as any area that is reseeded as a result of the repair. Also included in the affected areas are interspacial areas of thirty feet or less between repaired rills and gullies. Highly erodible areas are those areas which cannot usually be stabilized by ordinary conservation treatments and if left untreated can cause severe erosion or sediment damage.
- 357.364. The repair and/or treatment of rills and gullies which result from a deficient surface water control or grading plan, as defined by the recurrence of rills and gullies, will be considered an augmentative practice and will thus restart the extended responsibility period.

RECLAMATION PLAN

- 357.365. The Permittee shall demonstrate by specific plans and designs the methods to be used for the treatment of highly erodible areas and rills and gullies. These will be based on a combination of treatments recommended in the Soil Conservation Service Critical Area Planting recommendations, literature recommendations including those found in Appendix C of the Division's "Vegetation Information Guidelines", and other successful practices used at other reclamation sites in the State of Utah. Any treatment practices used will be approved by the Division.

The plan must be change to reflect the current Coal Mining Regulations.

A pinyon-juniper reference area was selected and approved for use as a vegetative standard in 1982. The pinyon-juniper reference area had 30% vegetative cover when measured in 1980.

Findings:

Information provided in the proposed amendment is not considered adequate to meet the minimum requirements of this section. Prior to approval, the Operator must provide the following in accordance with:

R645-301-357.300, all rill and gully repair will require a prior approved plan incorporated in the Mining and Reclamation Plan and a determination by the Division whether or not this activity restarts the period of extended liability.

MAPS, PLANS, AND CROSS SECTIONS OF RECLAMATION OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-323, -301-512, -301-521, -301-542, -301-632, -301-731.

Analysis:

Affected Area Boundary Maps

R645-301-500: Map Section of Appendix IV contains two maps, a pre and post reclamation map. The maps show the disturbed area boundary of the pumphouse area in red. The maps are certified by John Christensen, a Licensed Professional Engineer.

Findings:

The information provided meet the minimum regulatory requirements.